CRAFCO, INC.

Cheryl Jones – Area Manager


Concrete
Pavement
Preservation
Systems

CONCRETE JOINT SEALANTS

- Jet Fuel Resistant
- Petroleum Based

Formed In Place Joint Sealants

JET FUEL RESISTANT (JFR) COLD APPLIED

- SS-S-200E (H/M)
- Polysulfide Modified Coal Tar Composition
- Two Component
- 1 to 1 Mix Ratio
- Jet Fuel/Jet Blast Resistant
- Concrete Only
- Recess min. 1/8”
- 5-7 Year Life
- Excellent UV Resistance
- Low Temperature Bond Capabilities at -20°F
- Specialized Equip.
- More Resilient

JET FUEL RESISTANT (JFR) SEALANTS-HOT APPLIED

- SS-S-1614A – Federal Specification
- ASTM D-3569
- LOW-MOD (Exceeds ASTM D-3569 and SS-S-1614A)

JET FUEL RESISTANT (JFR) SEALANTS-HOT APPLIED (ASTM and SS-S)

- Concrete Pavements
- Joints or Cracks
- Jet Fuel Resistant
- UV Resistance
- 3-5 Year Life
- Recess min. 1/8”
- 0°F Bond
- 220°F Softening Point
- Moderate to Hot Climates
- Double Boiler Melter

SS-S-1614A

- Does Not Meet ASTM D 3569

ASTM D-3569

- Requires More Testing Than SS-S-1614A
- Meets SS-S- 1614A
- Both 1614A and 3569 have the same performance capabilities

LOW MOD JFR

- Low Modulus Joint Sealant
- Reduces Spalling
- Jet Fuel Resistant Sealant
- Excellent Long Term Characteristics-10 + years

  *Fairchild AFB 10 Year Test Section
- Improved Low Temperature Characteristics Over Other Fuel Resistant Joint Sealants
- Improved Aging Characteristics

Low Mod JFR Cont'd

- Proven History
  - *Pittsburg International Airport
  - *Fairchild AFB
  - *Six Airports in Canada
  - *Ten Airports in Europe

PETROLEUM BASED HOT APPLIED SEALANTS

CRACK/JOINT FILLING

- Placement of material in cracks to reduce infiltration of water and reinforce pavement
- Applicable only on non-working cracks
  - Longitudinal reflective cracks/joint
  - Longitudinal cracks/joints
  - Widely-spaced block cracks
- Requires little preparation of crack

CRACK/JOINT SEALING

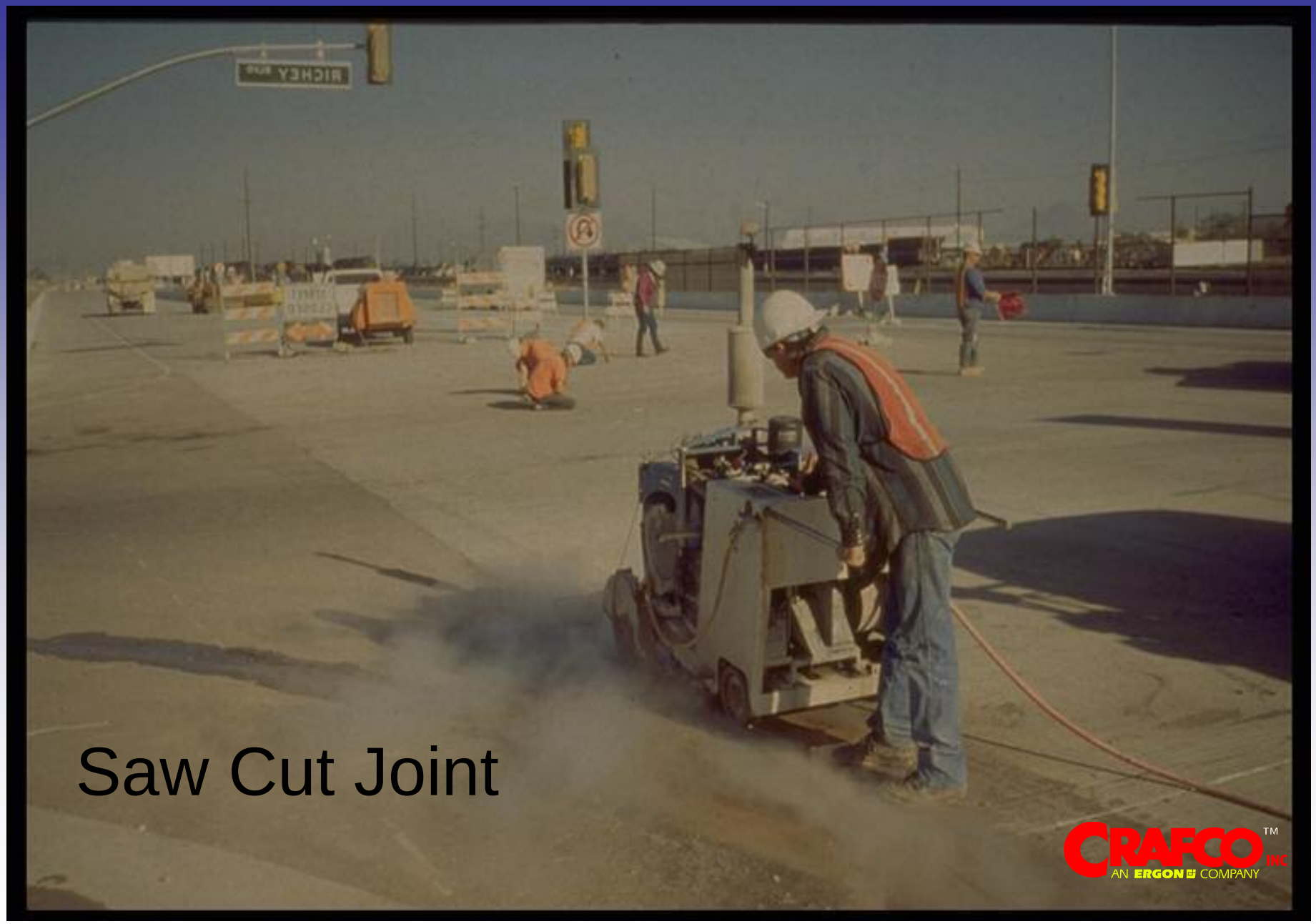
- Placement of specialized (elastic) materials into cracks to reduce infiltration
- Addresses working cracks
  - Reflective cracks
  - Thermal cracks
  - Working longitudinal
- Requires preparation of crack

ASTM-D 6690-01

- Type I – Moderate Climates (-18°C)
  Formerly ASTM D-1190
- Type II – Most Climates (-29°C)
  Formerly ASTM D-3405
- Type III – Most Climates (-29°C)
  Formerly SS-S-1401C
- Type IV – Very Cold Climates (-29°C)

PETROLEUM BASED SEALANTS

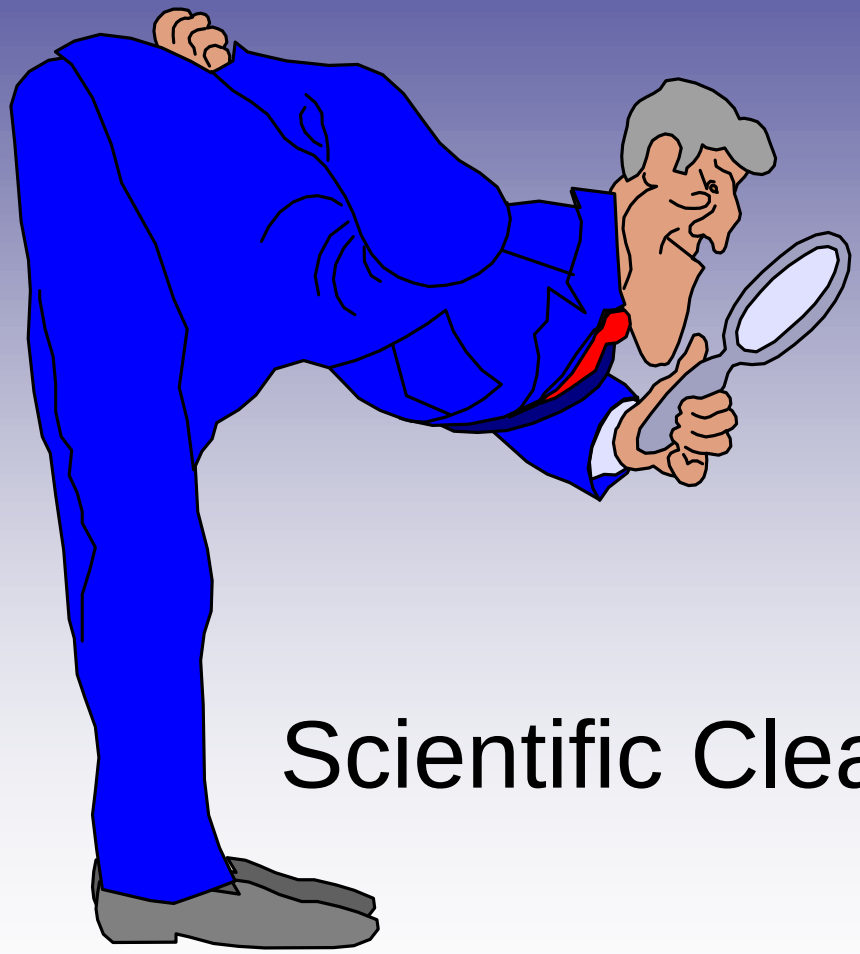
- Variety of Sealants
- Climatic Conditions
- Joint/Crack Width
- Joint/Crack Movements
- AC/PC
- Recess, Flush Fill or Overband
- Double Boiler Melter


Saw Cut Joint
CRAFCO INC
AN ERGON COMPANY


Water Blast

Sand Blast Joint Walls

REMEMBER!!!!!!



CLEAN AND DRY!

Scientific Cleanliness Test

CRAFCO INC
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DO NOT STRETCH
CRAFCO INC
AN ERGON COMPANY

BACKER ROD

- Closed Cell, Polyethylene Foam
- ASTM D 5249
- Non Water Absorbent
- Heat Resistant – when using hot applied sealants
- 25% Larger than Joint Width

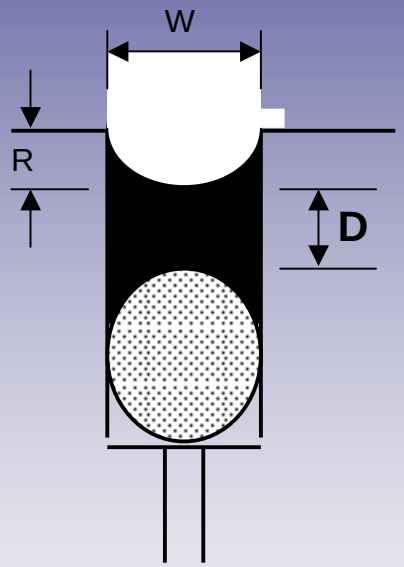
JOINT PREPARATION

- Saw joints to required width
- Flush Joints with Water-allow to dry
- Sand Blast Both Joint Walls – two passes
- Clean using Compressed Air
- Install Backer Rod-do not stretch or puncture
- Scientific Finger Test
- Other Cleaning Methods

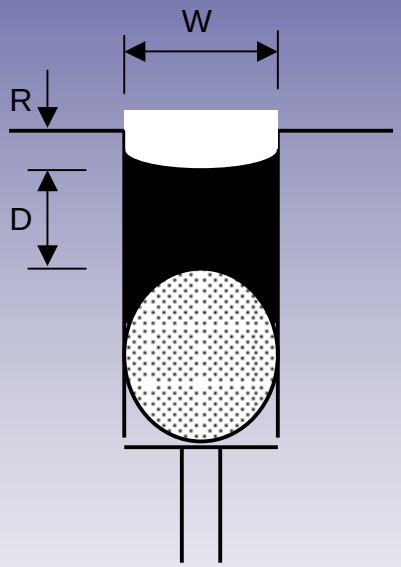
Proper Joint Configuration

PORTLAND CONCRETE PAVEMENTS

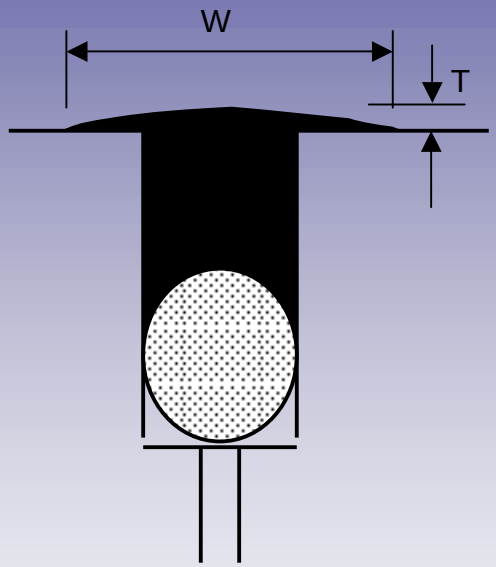
1. SILICONE



2. FUEL RESISTANT HOT-APPLIED



3. MODIFIED HOT-APPLIED



PCC Pavements

Product	Application Use	Fuel Resistant
• Superseal LM-	Aprons, Runways/Taxiways	Yes
• Superseal -	Aprons, Runways/Taxiways	Yes

PCC Pavements cont'd

Product	Application Use	Fuel Resistant
200E -	Aprons, Runways/Taxiways	Yes/Blast
Hot Pour-	Streets, Runways/Taxiways, AC/PCCP	No
TechCrete-	Partial depth Highways, Runways, Taxiways, Aprons	Interm.
Silicone-	Aprons, Runways, Taxiways, Streets	Interm.

TechCrete
PCCP Spall Repair Material

WHAT IS TECHCRETE

- **A Permanent Concrete Repair System**
- **Permanently Flexible**
- **Excellent Adhesion Properties**
- **Can be Trafficked within 1 hour**

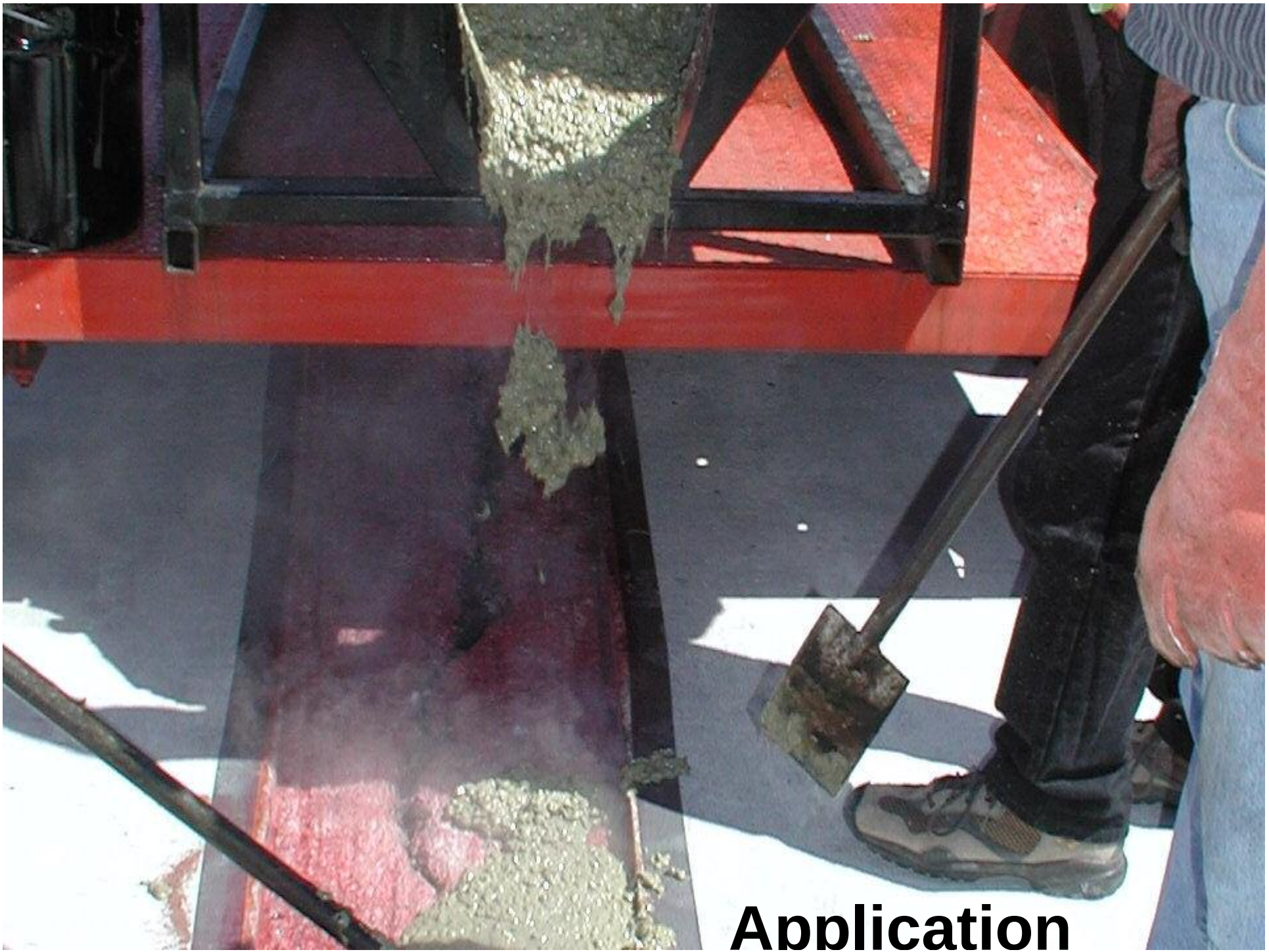
The Problem

- **Large Joints/Cracks**
- **Failed Thin Bond Repairs**
- **Failure on Slabs on Single & Multi Corners**
- **Manhole & Drainage Areas**

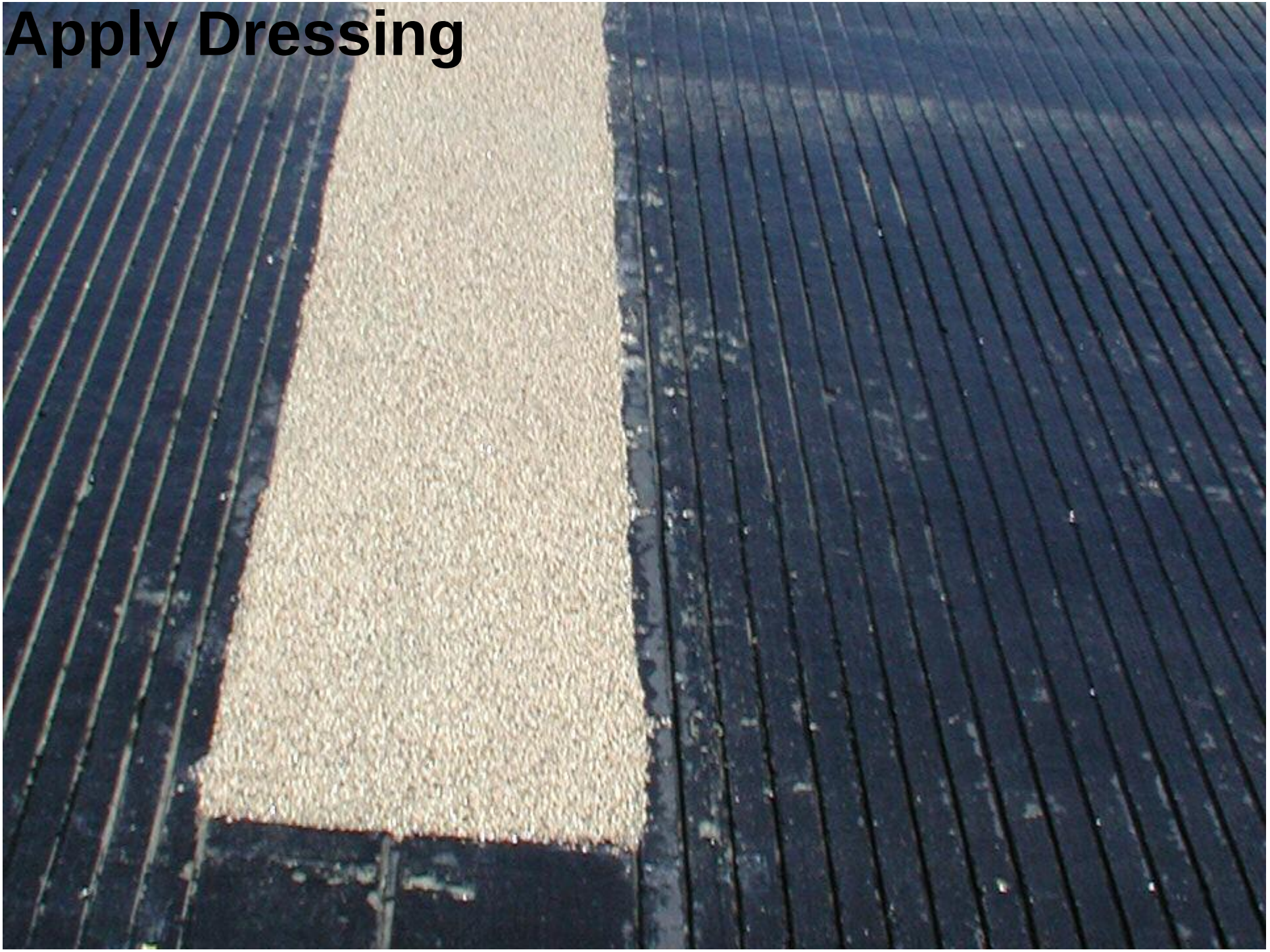
PREPARATION AND INSTALLATION


Saw Cut, Chip Out and
Clean with Compressed Air


Apply Primer


Application

Apply Dressing



Sacramento Airport

IN CONCLUSION

- Cold and Hot Applied Sealants
- Different Spec.
- Petroleum Based Sealants
- Crack/Joint Sealing
- Crack/Joint Filling
- Preparation
- Proper Joint Configuration
- Where to use the Different Sealants
- TechCrete as a Joint Repair

QUESTIONS

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